

# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

## PCT

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

To:

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Kita-ku, Osaka-shi,

Date of mailing (day/month/year)  
17 November 2005 (17.11.2005)

Applicant's or agent's file reference  
PCT-0401

IMPORTANT NOTIFICATION

International application No.  
PCT/JP2004/004145

International filing date (day/month/year)  
25 March 2004 (25.03.2004)

Applicant

AIR WATER INC. et al

### 1. Transmittal of the translation to the applicant.



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

### 2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

EP, KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

### 3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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## PATENT COOPERATION TREATY



## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCT-0401	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/JP2004/004145	International filing date (day/month/year) 25 March 2004 (25.03.2004)	Priority date (day/month/year) 26 March 2003 (26.03.2003)	
International Patent Classification (IPC) or national classification and IPC F25J 3/04			
Applicant AIR WATER INC.			

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 3 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
  - ☒ (sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
- This report contains indications relating to the following items:
  - ☒ Box No. I Basis of the report
  - ☐ Box No. II Priority
  - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - ☐ Box No. IV Lack of unity of invention
  - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - ☐ Box No. VI Certain documents cited
  - ☐ Box No. VII Certain defects in the international application
  - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 04 October 2004 (04.10.2004)	Date of completion of this report 08 June 2005 (08.06.2005)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/JP2004/004145

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
  - ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
  - pages \_\_\_\_\_ 1-12 \_\_\_\_\_, as originally filed/furnished
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
  - pages \_\_\_\_\_ 2-4 \_\_\_\_\_, as originally filed/furnished
  - pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
  - pages\* \_\_\_\_\_ 1 \_\_\_\_\_ received by this Authority on 17 January 2005 (17.01.2005)
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
  - pages \_\_\_\_\_ 1-6 \_\_\_\_\_, as originally filed/furnished
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP04/004145

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	1-4	YES
	Claims		NO
Inventive step (IS)	Claims	1-4	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-4	YES
	Claims		NO

**2. Citations and explanations (Rule 70.7)**

The constitution of an air separator wherein an air-compressing means, an oxygen-concentrating means, and an oxygen/air-compressing means are disposed and provided in a single line, whereby the total amount of air compressed by the air-compressing means is supplied to the oxygen/air-compressing means, is neither described in any of the documents cited in the ISR nor obvious to a person skilled in the art. The invention of the present application thereby produces an effect of making it possible to efficiently raise the oxygen concentration of material air by means of a simple structure. The subject matters of claims 1-4, therefore, appear to be novel, to involve an inventive step, and to be industrially applicable.



IAP4 Rec'd PCT/PTO 28 NOV 2005 CT

UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Hiroshi AOKI et al.**

Group Art Unit:

Serial No.: **10/550,627**

Examiner:

Filed: **September 26, 2005**

Confirmation No.:

For: **AIR SEPARATOR**

Attorney Docket Number: **053168**

Customer Number: **38834**

**SUBMISSION OF ENGLISH TRANSLATION OF IPER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

November 28, 2005

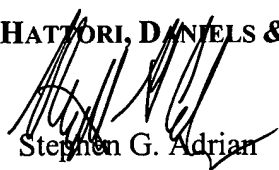
Sir:

Submitted herewith is an English translation of the International Preliminary Examination Report for the above-identified U.S. patent application.

If any additional fees are due in connection with this submission, please charge our Deposit Account No. 50-2866.

Respectfully submitted,

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